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Secret weapons testing on Weston's coastline

Vital military research took place all along Weston's coast during the Second World War. From Brean Down to Sand Point numerous experimental weapons were developed and tested. Some were so weird and impractical that they were scrapped after their initial trials. Other tests, however, produced weapons that were hugely successful when used by the military.



A Hedgehog anti-submarine mortar mounted on a ship

HMS Birnbeck

In 1941 Birnbeck Pier was taken over by the Admiralty, renamed HMS Birnbeck and closed to the public. The fairground and other attractions were dismantled. Nicknamed the "stone frigate", HMS Birnbeck became a research base for the Directorate of Miscellaneous Weapons Development (DMWD). This Admiralty department was responsible for developing new and unusual weapons. Located away from the main part of Weston, the pier was the perfect site for secret operations. Catapult tracks were installed to help with weapons testing.

Among the scientists based at HMS Birnbeck was Barnes Wallis, inventor of the first "bouncing bomb". The air-launched bomb literally bounced across water until it reached its target, avoiding underwater defences like torpedo nets. It would then sink before exploding. The bouncing bomb was used in the famous "Dambusters" raid of 1943. A ship-launched, rocket-propelled version was the first weapon to be tested on HMS Birnbeck's catapult tracks. It was intended to be used against enemy surface ships and submarines, but never entered service.

The DMWD's anti-submarine weapon called Hedgehog was more successful. The device would fire a number of bombs into the sea ahead of the warship using it. These were fitted with contact fuses which detonated directly against a submarine's hull. In tests, dummy bombs were fired from the end of HMS Birnbeck.

From 1942 Hedgehog was used together with regular depth charges to protect convoys against German U-Boats. By the war's end, one in every five uses of Hedgehog against U-Boats was successful.

The boffins at HMS Birnbeck were developing a flying saucer-shaped bomb when the war ended. Research operations at the pier stopped, however, before further progress was made.

After the war, the military installations were removed and HMS Birnbeck was handed back to its owners. The pier became a tourist attraction again.

Brean Down

At the outbreak of war the Victorian fort at the tip of Brean Down became an observation post and coastal battery. Six brick machine gun emplacements were built on top of the down at the landward end. Soldiers practised firing light machine guns called Lewis Guns from these positions at targets moored in Weston Bay. A huge concrete directional arrow on the south side guided trainee pilots on dummy bombing missions around Bridgwater Bay.



The concrete directional arrow on Brean Down @ Hywel Williams

Brean Down was also used by the DMWD as a launch site for rockets and other experimental weapons. It was relatively remote and with only one approach road so it could be easily secured. Catapult tracks were laid down in front of the fort.

Some of the DMWD's better known weapons were tested on Brean Down. These included the naval bouncing bomb, a rocket-propelled depth charge known as AMUCK, and the Expendable Noise-maker. This device was developed to confuse German torpedoes which homed in on the sound waves created by ship propellers.

Decoys would be launched from a ship which had detected a submarine. They produced huge amounts of noise and diverted any homing torpedoes away from the target.



What remains of the catapult on Brean Down @ James Stringer

During one weapons test a rocket was fired along the catapult tracks, but turned off course and headed inland at high speed. It exploded in a chicken run, narrowly missing the farmer who was inside the run at the time!

Today, the foundations of the command and observation post for the gun battery overlook Brean Down fort. The Lewis Gun positions and a short section of catapult track remain. The concrete arrow would have been painted white in wartime, but is still clearly visible.

Sand Point

Another isolated spot used for weapons testing was at Sand Point a few miles north of Weston. This peninsular and the neighbouring ridge of Middle Hope form a headland leading down to a pebble beach.



Test bombs being recovered from Sand Bay © Weston-super-Mare Library

The DMWD's facility at Sand Point focused mainly on developing and testing bombs. Catapult launch tracks were laid on the beach at Middle Hope Cove. A support base was built at St Thomas Head, at the eastern end of Middle Hope. The base overlooked Woodspring Bay where two ships sunk by German aircraft were used by the RAF as target practice.

The naval bouncing bomb was tested at Middle Hope, using the catapult tracks at first and then offshore on an old barge called Mary. The ship was fitted with a firing tube, and after some progress the explosive charge used to fire the bomb was increased. Disaster! The bomb shot out to sea then swerved back towards land. It jumped over the headland, frightening a herd of cattle, and was last seen heading out towards the Atlantic.

The shipwrecks used for bombing practice can be seen at low tide. Sand Point was reopened to the public after the war and the military relocated to St Thomas Head. The base closed in the early 2000s and is now derelict, although the area is still officially off-limits to the public.

